

ABSTRACT OF THE DISCLOSURE

Process for designing flight controllers, in which first for the rigid airplane and then for the elastic airplane the damping and the phase delay for each excitation frequency is determined, and the flight controller is adapted in such a manner that the structural responses to each excitation frequency for both the rigid airplane and the elastic airplane in the open control circuit outside two design fields, applicable to the elastic airplane, are laid around the instability points in the data field comprising damping and phase delay, whereby for the design of the elastic airplane between the phase delays of -270 degrees and -495 degrees, a damping exceeding -6 dB is allowed.